

**LPDES PERMIT NO. LA0003522 (Agency Interest No. 1406)****LPDES FACT SHEET and RATIONALE  
FOR THE DRAFT LOUISIANA POLLUTANT DISCHARGE ELIMINATION SYSTEM  
(LPDES) PERMIT TO DISCHARGE TO WATERS OF LOUISIANA**

- I. Company/Facility Name:** Motiva Enterprises LLC  
Norco Refinery  
P.O. Box 10  
Norco, Louisiana 70079
- II. Issuing Office:** Louisiana Department of Environmental Quality (LDEQ)  
Office of Environmental Services  
Water Permits Division  
Post Office Box 4313  
Baton Rouge, Louisiana 70821-4313
- III. Prepared By:** Melanie Beard Connor  
Industrial Water Permits Section  
Water Permits Division  
Phone #: (225) 219-3088  
Fax #: (225) 219-3309  
E-mail: melanie.connor@la.gov

**Date Prepared:** March 21, 2008

LAC 33:IX Citations: Unless otherwise stated, citations to LAC 33:IX refer to promulgated regulations listed at Louisiana Administrative Code, Title 33, Part IX.

40 CFR Citations: Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations in accordance with the dates specified at LAC 33:IX.4901, 4903, and 2301.F.

**IV. Permit Action/Status:**

**A. Reason For Permit Action:**

Proposed reissuance of a Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term following regulations promulgated at LAC 33:IX.2711/40 CFR 122.46.

In order to ease the transition from NPDES to LPDES permits, dual regulatory references are provided where applicable. The LAC references are the legal references while the 40 CFR references are presented for informational purposes

Fact Sheet and Rationale for  
 Motiva Enterprises LLC  
 LA0003522 / AI 1406  
 Page 2

only. In most cases, LAC language is based on and is identical to the 40 CFR language. 40 CFR Parts 401, 405-415, and 417-471 have been adopted by reference at LAC 33:IX.4903 and will not have dual references. In addition, state standards (LAC 33:IX, Chapter 11) will not have dual references.

- B. LPDES permit: Permit effective date: October 1, 2002  
 Permit expiration date: September 30, 2007

EPA has not retained enforcement authority.

- C. Application submittal date: Application submitted on April 4, 2007 and application addendum received on May 5, 2008, and additional information (email) received May 27, 2008

**V. Facility Information:**

- A. Location – 15536 River Road, Norco, St. Charles Parish (Latitude 29°59'45", Longitude 90°24'35").
- B. Applicant Activity -

According to the application, Motiva Enterprises LLC/Norco Refinery is a petroleum refinery involved in the production of petroleum products from crude oil, condensate, natural gas, and gas oil. Motiva Enterprises, LLC operates a wastewater treatment system for discharges of process, utility and miscellaneous wastewaters from the Motiva site. The wastewater treatment system also receives utility wastewater from two neighboring facilities (Shell Chemical, LP/Norco Chemical Plant, and CII Carbon)

Below is a summary of the facility's production information:

<u>Process</u>	<u>Proposed Production (1000 bbl/day)</u>
Atmospheric Crude Distillation	248.0
Crude Desalting	248.0
Fluid Catalytic Cracking	114.2
Vacuum Crude Distillation	90.0
Delayed Coking	25.0
Thermal Cracking	282.2
Hydrotreating	205.0
Hydrocracking	36.0
H <sub>2</sub> SO <sub>4</sub> Alkylation	17.4

Fact Sheet and Rationale for  
 Motiva Enterprises LLC/Norco Refinery  
 LA0003522 / AI 1406  
 Page 3

Catalytic Reforming	61.0
Contaminated Stormwater	0.892 MGD
Ballast water flow	0.014 MGD

- C. Technology Basis - (40 CFR Chapter I, Subchapter N/Parts 401, 405-415, and 417-471 have been adopted by reference at LAC 33:IX.4903)

Guideline  
 Refinery Guidelines

Reference  
 40 CFR 419, Subpart C

Other sources of technology based limits:

- LDEQ Stormwater Guidance, letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6)
- Best Professional Judgement

- D. Fee Rate -
1. Fee Rating Facility Type: Major
  2. Complexity Type: VI
  3. Wastewater Type: II
  4. SIC code: 2911, 2869, 2999, 1321

- E. Continuous Facility Effluent Flow - 17.09 MGD (30-day max)

**VI. Receiving Waters:** Mississippi River (Outfalls 002 and 003) and Lake Pontchartrain via Engineers Canal (Outfall 006)

Mississippi River:

- A. TSS (15%), mg/L: 30.0 mg/l\*
- B. Average Hardness, mg/L CaCO<sub>3</sub>: 153.0 mg/l\*
- C. Critical Flow, cfs: 141,955 \*
- D. Mixing Zone Fraction: 1/3 \*
- E. Harmonic Mean Flow, cfs: 366,748\*
- F. River Basin: Mississippi River, Segment No.: 070301
- G. Designated Uses: primary contact recreation, secondary contact recreation, fish and wildlife propagation, and drinking water supply

- \* Stream Data information based upon the following: Water Quality Management Plan, Volume 5A, 1994; LAC 33:IX Chapter 11, and from recommendations from the Engineering Section. Hardness and 15% TSS data come from the monitoring station #48 on the Mississippi River listed

Fact Sheet and Rationale for  
 Motiva Enterprises LLC/Norco Refinery  
 LA0003522 / AI 1406  
 Page 4

in Hardness and TSS Data for All LDEQ Ambient Stations for the Period  
 of Record as of March 1998, LeBlanc.

Lake Pontchartrain via Engineers Canal:

- A. River Basin: Lake Pontchartrain, Segment No.: 041202
- B. Designated Uses: primary contact recreation, secondary contact recreation, fish and wildlife propagation, and outstanding natural resource water

## **VII. Outfall Information:**

### Outfall 002

- A. Type of wastewater – The continuous discharge of treated process wastewaters, process area stormwater runoff, scrubber wastewater, utility wastewater (including but not limited to once through non-contact cooling water, cooling tower blowdown, boiler blowdown, and clarifier overflow), ballast water, miscellaneous wastewaters (including but not limited to firewater system test waters, condensate, effluent sample streams, etc), sanitary wastewater, and non-process area stormwater runoff
- B. Location – At the point of discharge from the treatment system aeration basin prior to combining with other waters (Latitude 29°59'35", Longitude 90°24'29").
- C. Treatment – Treatment of wastewater consists of\*:
  - screening
  - aeration
  - sedimentation
  - equalization/neutralization
  - trickling filter (for sanitary wastewater only)
  - chlorination (for sanitary wastewater only)
- \* The facility's wastewater is pumped to the facility's aerated Stormwater Impoundment Basin (SWIB) and then to the smaller Aeration Basin (AB) prior to discharge to the Mississippi River. Sanitary wastewater from the facility is treated by a trickling filter and chlorination system prior to discharge of the effluent to the SWIB for further treatment.
- D. Flow – Continuous: 17.09 MGD (30-Day Max)

Fact Sheet and Rationale for  
Motiva Enterprises LLC/Norco Refinery  
LA0003522 / AI 1406  
Page 5

- E. Receiving waters – Mississippi River
- F. Basin and segment – Mississippi River Basin, Segment 070301
- G. Effluent data – See Appendix C

Outfall 003

- A. Type of wastewater – The intermittent discharge of firewater system test waters
- B. Location – At the point of discharge from the firewater system hoses at the Norco-East Site wharf prior to discharge in the Mississippi River
- C. Treatment – None
- D. Flow – Intermittent flow is variable
- E. Receiving waters – Mississippi River
- F. Basin and segment – Mississippi River Basin, Segment 070301

Outfall 006

- A. Type of wastewater – The intermittent discharge of low contamination potential non-process area stormwater (Outfall 006 is a post first flush emergency bypass of the SWIB and the AB only used during extreme storm events.)
- B. Location – at the point of discharge from the bypass line off the SWIB forebay pumps to the west ditch, prior to mixing with other waters (Latitude 30°01'10", Longitude 90°24'10").
- C. Treatment – None
- D. Flow – Intermittent, flow is variable and depends upon rainfall.
- E. Receiving waters – Lake Pontchartrain via Engineers Canal
- F. Basin and segment – Lake Pontchartrain Basin, Segment 041202

Fact Sheet and Rationale for  
Motiva Enterprises LLC/Norco Refinery  
LA0003522 / AI 1406  
Page 6

### **VIII. Proposed Permit Limits and Rationale:**

The specific effluent limitations and/or conditions will be found in the draft permit. Development and calculation of permit limits are detailed in the Permit Limit Rationale section below.

The following section sets forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit. Also set forth are any calculations or other explanations of the derivation of specific effluent limitations and conditions, including a citation to the applicable effluent limitation guideline or performance standard provisions as required under LAC 33:IX.2707/40 CFR Part 122.44 and reasons why they are applicable or an explanation of how the alternate effluent limitations were developed.

#### **A. PERMIT CHANGES**

1. Outfall 002 – Phosphorus monitoring from the previous permit has been removed. This pollutant was added to the previous permit because at the time, phosphorus was a stream impairment listed on the 305(b) report. Since that time, the receiving waterbody segment (070301) has been delisted.
2. Outfall 003 – This outfall has been added to the permit.
3. Outfall 006 – Total Copper monitoring has been added due to the receiving waterbody's 303(d) impairment.
4. Outfall 002 – Guideline based mass limitations have increased based upon updated production information provided in the facility's application addendum.
5. Outfall 002 – The biomonitoring dilution series has changed based upon new flow information.
6. Part II – A condition has been added in Part II (Paragraph L) requiring the permittee to submit addition effluent sampling data for Outfall 006 as required by LAC 33:IX.2511.C.1.a.v.

#### **B. REQUESTED CHANGES**

1. The permittee requested that this Office increase the maximum pH limit at Outfall 002 to

Fact Sheet and Rationale for  
 Motiva Enterprises LLC/Norco Refinery  
 LA0003522 / AI 1406  
 Page 7

9.5 standard units. The permittee's request indicated that the diurnal respiration cycle of the algae causes slightly elevated pH levels in the facility's SWIB/AB effluents. This request is denied. This Office has reviewed the facility's DMRs. Because the Norco Refinery only reported 1 excursion of pH in the past 3 years, it appears that exception to the antibacksliding rule (LAC 33:IX.2707.L) is not justified. Therefore no increase in limitations has been granted.

2. The permittee requested that they be allowed to report zero (0) for Oil & Grease in lieu of less than (<) Minimum Quantification Level (MQL) when reporting a non-detect on their DMRs. This Office concurs with this request. In accordance with EPA Method 1664, Revision A, the minimum level of quantification is 5.0 mg/l. Therefore, the draft permit has included oil & grease (with an MQL of 5.0 mg/l) in Part II, Paragraph J. The permittee may report zero (0) for Oil & Grease if it is not detected in laboratory analysis, as long as an EPA approved method (which specifies a minimum level of quantification of 5.0 mg/l) is being used by the laboratory.
3. The permittee requested that they be allowed to discharge firesystem test water from the Norco-East Site wharf. It is understood that water from the firewater pond (which contains both stormwater and once through non-contact well water) will be used to test the system once per month. This Office has granted this request. Outfall 003 has been added to the permit for this intermittent discharge.
4. The facility requested that the Outfall 002 oil & grease allocations between Motiva and Shell be changed to 55% and 45%, respectively. After speaking with consultants for Motiva, it was indicated that if this Office approved the reporting of zero for oil & grease, the change in the allocations would not be needed. This Office approved the reporting of zero for oil & grease; therefore, no change in the oil & grease allocations will be made.

C. TECHNOLOGY-BASED VERSUS WATER QUALITY STANDARDS-BASED  
 EFFLUENT LIMITATIONS AND CONDITIONS

Following regulations promulgated at LAC 33:IX.2707.L.2.b/40 CFR Part 122.44(l)(2)(ii), the draft permit limits are based on either technology-based effluent limits pursuant to LAC 33:IX.2707.A/40 CFR Part 122.44(a) or on State water quality standards and requirements pursuant to LAC 33:IX.2707.D/40 CFR Part 122.44(d), whichever are more stringent.

TECHNOLOGY-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Regulations promulgated at LAC 33:IX.2707.A/40 CFR Part 122.44(a) require technology-based effluent limitations to be placed in LPDES permits based on effluent limitations guidelines where

Fact Sheet and Rationale for  
Motiva Enterprises LLC/Norco Refinery  
LA0003522 / AI 1406  
Page 8

applicable, on BPJ (best professional judgement) in the absence of guidelines, or on a combination of the two. The following is a rationale for the limitations established in the permit.

Motiva Enterprises LLC is subject to Best Practicable Control Technology Currently Available (BPT) and Best Available Technology Economically Achievable (BAT) effluent limitation guidelines listed below:

<u>Manufacturing Operation</u>	<u>Guideline</u>
Refinery	40 CFR 419, Subpart C

#### SITE-SPECIFIC CONSIDERATIONS

1. Allocation of refinery limits for Motiva Enterprises LLC/Norco Refinery  
The Motiva Norco Refinery sends an estimated 3.17 MGD of process wastewater from the refinery to the Shell Chemical Plant-West Site wastewater treatment plant for treatment and discharge under LA0005762. Therefore, in the previous permits for Motiva and Shell, Motiva's refinery guideline limits were divided between the Motiva permit (LA0003522) and the Shell Chemical permit (LA0005762). The allocations were based on the proportion of refinery wastewater flow and TOC loadings sent to the Shell Chemical Plant's wastewater treatment system (the biotreater).

The percentage of loading allocations established in the Motiva and Shell permits were originally developed by EPA Region VI during the renewal permit process in 1989. These allocations were retained by LDEQ in the 2002 permit renewals, with the exception of sulfide. The sulfide allocation percentage changed in 2002 because the applicant asked that the Motiva allocation percentage for sulfide be changed to 60%. All allocation percentages from the previous 2002 LPDES permit have been retained in the current permit.



Fact Sheet and Rationale for  
 Motiva Enterprises LLC/Norco Refinery  
 LA0003522 / AI 1406  
 Page 9

Below is a summary of the allocation percentages:

Parameter	% Allocated to Motiva site (LA0003522 – Outfall 002)	% Allocated to Shell site (LA0005762 – Outfall 001)
BOD <sub>5</sub>	48%	52%
TSS	100%	0%
Oil & Grease	48%	52%
TOC	48%	52%
Ammonia	48%	52%
Sulfide	60%	40%
Phenolic Compounds	48%	52%
Chromium (Total)	100%	0%
Chromium (6+)	100%	0%

2. BPJ Allocations for sanitary wastewater, landfill leachate and scrubber wastewater  
 There have been no BPJ allocations established in the permit for sanitary wastewater, landfill leachate or scrubber wastewater. However in the Shell Chemical permit (LA0005762), as previously permitted, landfill leachate received BPJ allocations for OCPSF guideline values for BOD<sub>5</sub>, TSS, and toxic organics.

#### WATER QUALITY-BASED EFFLUENT LIMITATIONS

Technology-based effluent limitations and/or specific analytical results from the permittee's application were screened against state water quality numerical standard based limitations by following guidance procedures established in the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, April 16, 2008.

In accordance with 40 CFR 122.44(d)(1)/LAC 33:IX.2707.D.1., the existing discharge was evaluated in accordance with the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, April 16, 2008, to determine whether pollutants would be discharged "at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any state water quality standard." Calculations, results, and documentation are given in Appendix B.

The following pollutants received water quality based effluent limitations:

None

Fact Sheet and Rationale for  
 Motiva Enterprises LLC/Norco Refinery  
 LA0003522 / AI 1406  
 Page 10

Minimum quantification levels (MQLs) for state water quality numerical standards-based effluent limitations are set at the values listed in the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, April 16, 2008. They are also listed in Part II of the permit.

To further ensure compliance with 40 CFR 122.44(d)(1), whole effluent toxicity testing has been established for Outfall 002 (See Section VIII.E below).

Below is a summary of the effluent limitations proposed in the draft permit:

**Outfall 002** – The continuous discharge of treated process wastewaters, process area stormwater runoff, scrubber wastewater, utility wastewater (including but not limited to once through non-contact cooling water, cooling tower blowdown, and boiler blowdown, clarifier overflow), ballast water, miscellaneous wastewaters (including but not limited to firewater system test waters, condensate, effluent sample streams, etc), sanitary wastewater and non-process area stormwater runoff

Parameter	Proposed Permit Limits		Monitoring Frequency	Rationale
	Monthly Avg lbs/day	Daily Max lbs/day		
Flow – MGD	Report	Report	Continuous	LAC 33:IX.2707.1.1.b.
pH	See * below	See * below	Continuous	BPJ, previous permit, LAC 33:IX.1113
BOD	2228	4143	3/week	40 CFR 419, Subpart C
TSS	3751	5925	3/week	40 CFR 419, Subpart C
Oil & Grease	718	1336	1/week	40 CFR 419, Subpart C
TOC	4901	9114	1/week	Previous permit
Ammonia (as N)	1246	2706	1/month	40 CFR 419, Subpart C

Fact Sheet and Rationale for  
 Motiva Enterprises LLC/Norco Refinery  
 LA0003522 / AI 1406  
 Page 11

Sulfide (as S)	14.4	32.0	2/week	40 CFR 419, Subpart C
Phenolic Compounds	14.1	30.1	2/week	40 CFR 419, Subpart C
Total Chromium	34.0	98.1	1/year	40 CFR 419, Subpart C
Chromium (6+)	2.9	6.4	1/year	40 CFR 419, Subpart C
Biomonitoring	See Section IX below	See Section IX below	1/year	See Section E below

\* The pH shall be within the range of 6.0 – 9.0 standard units at all times subject to continuous monitoring pH range excursion provisions. Where a permittee continuously measures the pH of wastewater as a requirement or option in an LPDES permit, the permittee shall maintain the pH of such wastewater within the range set forth in the permit, except that excursions from the range are permitted, provided:

1. The total time during which the pH values are outside the required range of pH values shall not exceed 446 minutes in any calendar month; and
2. No individual excursion from the range of pH values shall exceed 60 minutes.

**EFFLUENT LIMITATIONS BASIS for Outfall 002:**

**Flow:** The requirement to report flow is based upon LAC 33:IX.2707.1.1.b. and the previous permit.

**pH:** Requirements are based upon the previous permit and LAC 33:IX.1113.C.1.

**BOD, TSS, Oil & Grease, Ammonia, Sulfide, Phenolic Compounds, Total Chromium, and, Chromium VI:** Limitations are based upon 40 CFR 419 Subpart C. See Appendix A for more information on calculation of the limitations.

**TOC:** The mass limitations for TOC were calculated based upon the previous permit. In the previous permit a TOC:BOD ratio of 2.2 was established. This ratio has been retained in the permit renewal. See Appendix A for more information on calculation of the limitations

**Whole Effluent Toxicity Testing:** See Section E below for justification of requirements.

Fact Sheet and Rationale for  
 Motiva Enterprises LLC/Norco Refinery  
 LA0003522 / AI 1406  
 Page 12

**Outfall 003 - Firewater system test waters**

Parameter	Proposed Permit Limitations		Monitoring Freq.	Rationale
	Monthly Avg mg/l	Daily Max mg/l		
Flow	Report	Report	1/quarter	LAC 33:IX.2707.1.1.b.
pH	6.0 s.u. (Min)	9.0 s.u. (Max)	1/quarter	BPJ, LDEQ Stormwater Guidance
TOC	---	50 mg/l	1/quarter	BPJ, LDEQ Stormwater Guidance
Oil & Grease	---	15 mg/l	1/quarter	BPJ, LDEQ Stormwater Guidance

**EFFLUENT LIMITATIONS BASIS for Outfall 003:**

**Flow:** The requirement to report flow is based upon LAC 33:IX.2707.1.1.b.

**TOC and Oil & Grease:** Limitations are based upon BPJ and LDEQ's stormwater guidance [letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6)].

**pH:** Requirements are based upon LAC 33:IX.1113.C.1.

Fact Sheet and Rationale for  
 Motiva Enterprises LLC/Norco Refinery  
 LA0003522 / AI 1406  
 Page 13

**Outfall 006** – The intermittent discharge of low contamination potential non-process area stormwater (post first flush)

Parameter	Proposed Permit Limitations		Monitoring Freq.	Rationale
	Monthly Avg mg/l	Daily Max mg/l		
Flow	Report	Report	1/quarter	LAC 33:IX.2707.1.1.b.
pH	6.0 s.u. (Min)	9.0 s.u. (Max)	1/quarter	Previous permit, LDEQ Stormwater Guidance
TOC	---	50 mg/l	1/quarter	Previous permit, LDEQ Stormwater Guidance
Oil & Grease	---	15 mg/l	1/quarter	Previous permit, LDEQ Stormwater Guidance
Total Copper	---	Report	1/quarter	303(d) impairment

**EFFLUENT LIMITATIONS BASIS for Outfall 006:**

**Flow:** The requirement to report flow is based upon LAC 33:IX.2707.1.1.b. and the previous permit.

**TOC and Oil & Grease:** Limitations are based upon the previous permit and LDEQ's stormwater guidance [letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6)].

**Total Copper:** For the purpose of collecting data that may be used in future permitting decisions and/or TMDL development, total copper monitoring and reporting requirements have been established in the permit.

**pH:** Requirements are based upon the previous permit and LAC 33:IX.1113.C.1.

Fact Sheet and Rationale for  
 Motiva Enterprises LLC/Norco Refinery  
 LA0003522 / AI 1406  
 Page 14

#### D. MONITORING FREQUENCIES

All monitoring frequencies for Outfalls 002 and 006 are based upon the previous permit. Whole Effluent Toxicity testing frequency is based upon recommendations from the Municipal and General Water Permits Section (see Appendix D). For Outfall 003, the monitoring frequencies are based upon Office practices for similar discharges.

#### E. BIOMONITORING REQUIREMENTS

It has been determined that there may be pollutants present in the effluent which may have the potential to cause toxic conditions in the receiving stream. The State of Louisiana has established a narrative criteria which states, "toxic substances shall not be present in quantities that alone or in combination will be toxic to plant or animal life." The Office of Environmental Services requires the use of the most recent EPA biomonitoring protocols.

Whole effluent biomonitoring is the most direct measure of potential toxicity which incorporates both the effects of synergism of effluent components and receiving stream water quality characteristics. Biomonitoring of the effluent is, therefore, required as a condition of this permit to assess potential toxicity. The biomonitoring procedures stipulated as a condition of this permit for Outfall 002 are as follows:

<u>TOXICITY TESTS</u>	<u>FREQUENCY</u>
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 48-Hour Acute, <u>Pimephales promelas</u>	1/year
NOEC, Value [%], Lethality, Static Renewal, 48-Hour Acute, <u>Pimephales promelas</u>	1/year
NOEC, Value [%] Coefficient of Variation, Static Renewal 48-Hour Acute, <u>Pimephales promelas</u>	1/year
NOEC, Pass/Fail [0/1], Lethality, Static Renewal 48-Hour Acute, <u>Daphnia pulex</u>	1/year

Fact Sheet and Rationale for  
Motiva Enterprises LLC/Norco Refinery  
LA0003522 / A1 1406  
Page 15

NOEC, Value [%], 1/year  
Lethality, Static Renewal  
48-Hour Acute  
Daphnia pulex

NOEC, Value [%] 1/year  
Coefficient of Variation, Static Renewal  
48-Hour Acute,  
Daphnia pulex

Toxicity tests shall be performed in accordance with protocols described in the latest revision of the "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms." The stipulated test species are appropriate to measure the toxicity of the effluent consistent with the requirements of the State water quality standards. The biomonitoring frequency has been established to reflect the likelihood of ambient toxicity and to provide data representative of the toxic potential of the facility's discharge in accordance with regulations promulgated at LAC 33:IX.2715/40 CFR Part 122.48.

Results of all dilutions as well as the associated chemical monitoring of pH, temperature, hardness, dissolved oxygen, conductivity, and alkalinity shall be documented in a full report according to the test method publication mentioned in the previous paragraph. The permittee shall submit a copy of the first full report to this Office. The full report and subsequent reports are to be retained for three (3) years following the provisions of Part III.C.3 of this permit. The permit requires the submission of certain toxicity testing information as an attachment to the Discharge Monitoring Report.

This permit may be reopened to require effluent limits, additional testing, and/or other appropriate actions to address toxicity if biomonitoring data show actual or potential ambient toxicity to be the result of the permittee's discharge to the receiving stream or water body. Modification or revocation of the permit is subject to the provisions of LAC 33:IX.3105/40 CFR 124.5. Accelerated or intensified toxicity testing may be required in accordance with Section 308 of the Clean Water Act.

#### Dilution Series

The permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests. The additional effluent concentrations shall be 0.2%, 0.3%, 0.4%, 0.6%, and 0.7% effluent. The biomonitoring critical dilution is defined as 0.6% effluent.

Fact Sheet and Rationale for  
 Motiva Enterprises LLC/Norco Refinery  
 LA0003522 / AI 1406  
 Page 16

#### **IX. Compliance History/DMR Review:**

The Office of Environmental Compliance is in the process of resolving the following open enforcement actions:

- Consolidated Compliance Order and Notice of Potential Penalty (WE-CN-01-0017): issued on September 24, 2001 for unauthorized discharge, failure to implement an adequate Spill Prevention and Control (SPC) Plan, effluent violations, and failure to submit non-compliance reports.
- Consolidated Compliance Order and Notice of Potential Penalty (WE-CN-04-1034): issued on November 23, 2004 for effluent violations, unauthorized discharges, and improper operation and maintenance.
- Amended Consolidated Compliance Order and Notice of Potential Penalty (WE-CN-04-1034A): issued on May 20, 2005, addressed amendments to the prior order WE-CN-041034.

On December 14, 2007, Motiva was issued an amended Settlement Agreement which addressed the following enforcement actions (these actions are now closed):

- Notice of Potential Penalty (WE-PP-99-0205) issued on February 28, 2000
- Compliance Order (WE-C-99-0204): and March 2, 2000 for improper operation and maintenance, unauthorized bypass, improper laboratory practices, and failure to submit notice of bypass.
- Settlement Agreement issued on July 2, 2001 related to several air enforcement actions and water enforcement actions WE-C-99-0204 and WE-PP-99-0205

#### DMR Review (excursions for the period January 2005 - February 2008):

<u>Date</u>	<u>Parameter</u>	<u>Outfall</u>	<u>Reported</u>	<u>Permit Limit</u>
12/31/06	pH	002	>60 minutes (1 event)	>60 minutes (0 events)
1/31/07	Oil & Grease	002	667 lbs/day (Mthly Avg)	636 lbs/day (Mthly Avg)
12/31/07	Oil & Grease	006	22 mg/l (Daily Max)	15 mg/l (Daily Max)
1/31/08	TSS	002	8290 lbs/day (Daily Max)	5253 lbs/day (Daily Max)

#### **X. Endangered Species:**

The receiving waterbodies for Motiva Enterprises LLC are Subsegment 070301 of the Mississippi River Basin and Segment 041202 of the Lake Pontchartrain Basin. Segment 041202 is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). However, Segment 070301 of the Mississippi River Basin has been identified by the U.S. Fish and Wildlife Service (FWS) as habitat for the Pallid Sturgeon,



Fact Sheet and Rationale for  
Motiva Enterprises LLC/Norco Refinery  
LA0003522 / AI 1406  
Page 17

which is listed as a threatened or endangered species. This draft permit has been submitted to the FWS for review in accordance with a letter dated October 24, 2007 from Boggs (FWS) to Brown (LDEQ). As set forth in the Memorandum of Understanding between the LDEQ and the FWS, and after consultation with FWS (as per letter to LDEQ from FWS dated June 6, 2008), LDEQ has determined that the issuance of the LPDES permit is not likely to have an adverse effect upon the Pallid Sturgeon. Effluent limitations are established in the permit to ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. The more stringent of technology and water quality based limits (as applicable) have been applied to ensure maximum protection of the receiving water.

#### **XI. Historic Sites:**

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

#### **XII. Tentative Determination:**

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharges described in the application.

#### **XIII. Variances:**

No requests for variances have been received by this Office.

#### **XIV. Public Notices:**

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the fact sheet. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

A public notice will be published in a local newspaper of general circulation and in the Office of Environmental Services Public Notice Mailing List.

Fact Sheet and Rationale for  
Motiva Enterprises LLC/Norco Refinery  
LA0003522 / AI 1406  
Page 18

#### **XV. TMDL Waterbodies:**

Motiva Enterprises LLC/Norco Refinery discharges process wastewaters, utility wastewaters, miscellaneous wastewaters, stormwater and sanitary wastewaters to the Mississippi River (Segment 070301). Segment 070301 is not listed on LDEQ's Final 2006 303(d) List, as impaired, and to date no TMDLs have been established.

Motiva also has a stormwater emergency bypass outfall that discharges to Subsegment 041202. Subsegment 041202 of the Lake Pontchartrain Basin is listed on LDEQ's 2006 303(d) List as impaired for copper. To date, no TMDLs have been completed. TMDLs are scheduled for completion by March 31, 2011, with an EPA backstop date of March 31, 2012. This Office has determined that due to the nature of the discharge from Motiva's Outfall 006, there is no reasonable potential to discharge copper at a level which would cause further impairment of the receiving waterbody. For the purpose of collecting data that may be used in future permitting decisions and/or TMDL development, total copper monitoring and reporting requirements have been established in the permit.

A reopener clause will be included in the permit to allow for the establishment of more stringent effluent limitations and requirements as imposed by any future TMDLs.

#### **XVI. Stormwater Pollution Prevention Plan (SWP3) Requirements:**

In accordance with LAC 33:IX.2707.1.3 and 4[40 CFR 122.44(l)(3) and (4)], a Part II condition is proposed for applicability to all stormwater discharges from the facility, either through permitted outfalls, through outfalls which are not listed in the permit or as sheet flow. The Part II condition requires implementation of a Storm Water Pollution Prevention Plan (SWP3) within six (6) months of the effective date of the final permit, along with other requirements. If the permittee maintains other plans that contain duplicative information, that plan could be incorporated by reference into the SWP3. Examples of these type plans include, but are not limited to: Spill Prevention Control and Countermeasures Plan (SPCC), Best Management Plan (BMP), Response Plans, etc. The conditions will be found in the draft permit. Including Best Management Practice (BMP) controls in the form of a SWP3 is consistent with other LPDES and EPA permits regulating similar discharges of storm water associated with industrial activity, as defined at LAC 33:IX.2511.B.14 [40 CFR 122.26(b)(14)].